

**CHARTER OF THE
DEPARTMENT OF ENERGY
CRITICALITY SAFETY SUPPORT GROUP
JANUARY 1998**

I. BACKGROUND

On July 14, 1997, the Department of Energy (DOE) accepted Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 97-2, *Criticality Safety*. Subrecommendation 8 within Recommendation 97-2 states:

Identify a core group of criticality experts experienced in the theoretical and experimental aspects of neutron chain reaction to advise on the above steps and assist in resolving future technical issues.

The Criticality Safety Support Group (CSSG) was formed in response to Subrecommendation 8 and is composed of persons from DOE staff and contractors having collective knowledge in a broad spectrum of criticality safety areas.

II. MISSION

The CSSG functions as the technical support group to the Nuclear Criticality Safety Program Management Team (NCSPMT) which was also formed in response to DNFSB Recommendation 97-2. The CSSG provides operational and technical expertise pertinent to the criticality safety needs of DOE missions. These include materials stabilization, transportation, storage, facilities decommissioning, and waste disposal. This expertise is relevant to experiments, nuclear data, methods, training, organizational structures, and criticality safety evaluations.

In its support role, the CSSG responds to requests from the NCSPMT for information, reviews, and evaluations. The CSSG also makes recommendations for the implementation and execution of the coherent, efficient criticality safety program established by the DOE in response to Recommendation 97-2.

III. OPERATION OF THE CSSG

A. Membership

The charter members of the CSSG were selected by the NCSPMT, the management team formed in response to DNFSB Recommendation 97-2. These members and their affiliations are listed in the Appendix to this Charter.

Members of the CSSG are selected by the NCSPMT and are appointed to three-year renewable terms. To ensure continuity in the operation of the CSSG, terms should overlap with no more than half of the CSSG replaced at any one time.

Because of the interdisciplinary aspects of nuclear criticality safety at DOE facilities with widely varying missions, the membership shall consist of highly-qualified staff that have extensive experience in the broad spectrum of disciplines necessary to evaluate technical and operational aspects of nuclear criticality safety.

In addition, to supplement the expertise of the CSSG members, the CSSG, with the approval of the NCSPMT, may request other qualified individuals to provide the CSSG with specific technical expertise for specific tasks.

B. Organization

The Chair of the CSSG is appointed from the membership by the NCSPMT for a renewable one-year term. The Chair is responsible for coordinating the activities of the CSSG with the NCSPMT and for reporting the activities of the CSSG to the NCSPMT.

The CSSG Chair may appoint subcommittees from the CSSG membership to review, report, or act on any matter of concern that comes before the CSSG.

C. Meetings

CSSG meetings shall be called by the Chair as needed, but the CSSG shall be convened at least semi-annually. The presence of the Chair is mandatory unless special arrangements, as approved previously by the Chair with the concurrence of the NCSPMT, have been made.

The schedule of items to be addressed at the meeting is based on directions from the NCSPMT or requests made directly to members of the CSSG. An agenda for each CSSG meeting should be prepared in advance of a scheduled meeting and distributed to the members of the CSSG and the NCSPMT together with any materials needed for review of the agenda items.

The Chair of the CSSG shall ensure that the minutes of each meeting are formally recorded. Verbatim minutes of the meetings are not required, but the main points of the issues discussed must at least be summarized. The minutes shall also include the bases and the rationale for any decisions reached by the CSSG and for any recommendations made to the NCSPMT.

After review and concurrence by the members of the CSSG, the minutes shall be forwarded to the NCSPMT.

D. Activities

The CSSG provides support to the NCSPMT for the performance of activities specified in the implementation plan for DNFSB Recommendation 97-2. Because Recommendation 97-2 subsumes Recommendation 93-2, ongoing activities of the NCPP are also major activities of the CSSG. They are the experiments, training nuclear data, methods, and benchmarking.

The CSSG will, in general, review and evaluate activities or conditions that have, or could have, a significant effect on nuclear criticality safety at DOE facilities. The activities of the CSSG will generally be in response to directions from the NCSPMT, but may arise from unsolicited requests for assistance from personnel with the DOE complex. In order for the CSSG to act upon these unsolicited requests, concurrence of the NCSPMT is required.

The results of any evaluation, review, or similar activity by the CSSG shall be transmitted to the NCSPMT in a formal report. These reports shall represent the consensus position of the CSSG members. In the event of serious disagreement with the content of any such report, CSSG members, either individually or with other members, may submit a minority report to the NCSPMT. The NCSPMT will take action as needed to resolve the issues raised by any minority report and inform the authors of that report of the resolution.

APPENDIX

Charter members of the Criticality Safety Support Group

	Name	Affiliation
Chair	Adolf S. Garcia	DOE-ID
Members	Richard E. Anderson	LANL
	Dennis E. Cabrilla	DOE-EM
	Calvin M. Hopper	ORNL
	Jerry McKamy	DOE-EH
	Thomas P. McLaughlin	LANL
	James A. Morman	ANL
	Thomas A. Reilly	WSMS
	Robert M. Westfall	ORNL
	Robert E. Wilson	SSC

Enclosure 3

**Report of Completion of Milestones from the Criticality Safety Information
Resource Center (CSIRC) Pilot Program
(IP Commitment 6.2.1 Milestones 1, 2, and 3)**

Commitment 6.2.1: Perform CSIRC pilot program

Milestone 1: Identify an experiment to archive

Experiment name: Critical Experiments on Single-Unit Spherical Plutonium
Geometries, Reflected and Moderated

Experiment description: Single unit plutonium metal spheres in oil

Date performed: 1968

Experimenter(s): Bob Rothe

Facility: Rocky Flats Critical Mass Laboratory

Milestone 2: Archive logbook(s) and calculation(s) for that experiment

Location of archived logbooks: Los Alamos National Laboratory

Milestone 3: Videotape original experimenter

Experimenter: Bob Rothe

Videotape date: Spring 1997